

Looking Ahead – August 2005

Bridge Site

West-half roadway widening (north side):

- Pour concrete for the road deck on four of the pontoons
- Pour concrete for traffic barriers on four of the pontoons
- Continue to place epoxy coated rebar on lift spans

West-half approach span work:

- Roll new approach span (August 11-15)

East-half approach span work:

- Install items in preparation for the jacking and rolling operation
- Roll new approach span (August 21-25)

Anchor Cable Replacement

- Check anchor cable placement via a remote operated vehicle (a submersible device with a camera mounted on it)

Graving Dock Site

- Continue site selection process
- Negotiate contract changes with Kiewit-General

Public Information

- Hold media field day
- Escort media during three-day closures
- Coordinate three-day closure mitigation elements



Assembling temporary supports for the existing west approach span

This report highlights work accomplished for the Hood Canal Bridge Project from July 1-31, 2005. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site: www.hoodcanalbridge.com.

For more information, contact:

Lloyd D. Brown, Media Relations
(360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6310 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
(360) 704-6308 • hixsonb@wsdot.wa.gov



What is an approach span?

- Approach spans are fixed structures (they don't float), built on concrete piers that connect the floating bridge to the land.
- New approach spans are being constructed adjacent to the existing roadway. During the closures, the existing approaches will be rolled onto temporary supports, and the new approach spans will be rolled into place.
- During the rollover, the roadway sections will reach a top speed of approximately 5 feet per hour. A typical northwest banana slug can reach speeds of approximately 37 feet per hour.

East vs. West Approach Spans

During the closures – one closure for each bridge end – the contractor will place the existing approach span on rollers; roll that existing span onto temporary falsework; and roll the new roadway into place.

West

- 190-feet long, about the length of the Goodyear Blimp
- 2.2 million pounds (1,110 tons)
- 757 liner feet of girders
- 1,841 cubic yards of concrete
- 208 tons of epoxy coated reinforcing steel
- 6,000 pounds of structural steel
- 17,000 pounds of stainless steel

East

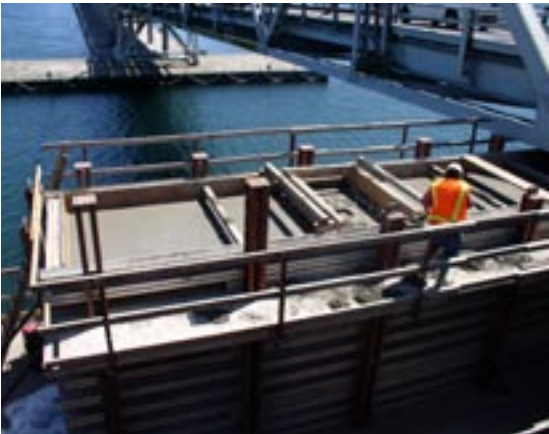
- 640-feet long, more than two football fields in length
- 7.6 million pounds (3,810 tons), the equivalent in weight to moving more than 100 gray whales or 500 male African elephants
- 2,960 liner feet of girders
- 5,810 cubic yards of concrete
- 778 tons of epoxy coated reinforcing steel
- 12,000 pounds of structural steel
- 50,000 pounds of stainless steel



Preparation continues on the east half approach span replacement



WSDOT inspector tests concrete before new west approach span deck pour



Crew completes Pier 3 concrete pour

Hood Canal Bridge Retrofit and East Half Replacement Project

WEST-HALF RETROFIT COMPLETION: 2005

EAST-HALF REPLACEMENT COMPLETION GOAL: 2009

July 2005

What It Takes To Close A Bridge

Getting ready for the State Route 104 Hood Canal Bridge three-day closures required extensive planning, preparation and effort by the operations planning committee. Representatives from the region Traffic office, Port Angeles Project Engineers office, Port Orchard Maintenance, Port Angeles Maintenance, Washington State Patrol, Hood Canal Bridge Project office, region Work Zone Traffic Control and Olympic Region communications focused on providing advance notification, helping drivers find alternative travel options, efficiently putting the mitigation plan in place and finding effective ways to quickly update drivers when the bridge opened. Here is what they accomplished prior to the closures.

- 1 camera installed to record the approach span rollovers
- 2 traveler courtesy stations organized
- 3 boat ramp closed signs posted
- 4 permanent variable message signs ready to light up
- 5 Highway Advisory Radio transmitters activated
- 6 freight associations notified
- 7 portable variable message signs prepared to post messages
- 8 full-page ads scheduled in regional newspapers
- 9 days of on-board ferry announcements scheduled
- 19 bright orange bridge info signs installed
- 24 hour-a-day phone coverage for information line



- 36 new web pages created on www.hoodcanalbridge.com
- 50 links established to project web site
- 65 WSDOT staff participated in plan implementation
- 80 local partnerships created
- 100 posters hung on area ferries
- 180 radio spots booked on Port Angeles radio station KONP
- 300 letters mailed to areas businesses
- 4,500 miles driven locating, staking and inspecting signs
- 35,000 detour maps distributed
- 75,000 tabloids inserted in local newspapers
- 123,000 postcards mailed directly to area homes

Work at the Bridge - July 2005



Week of July 1-7

- Tied epoxy-coated steel rebar in preparation for west-half widening deck pour
- New steel framing set in place for west-half bridge spans
- West-half widening deck concrete poured for 1 pontoon



Week of July 8-14

- Poured concrete for west-half approach span road deck
- Finished pouring concrete for east side Piers 6, 7, 8 and 9 end diaphragms (concrete supports between the girders)
- Completed setting all girders for west-half widening
- Poured concrete for east-side Pier 10 south wing wall (retaining wall parallel to the bridge)



Week of July 15-21

- West-half deck widening concrete poured for two pontoons
- New steel framing set in place for west-half bridge spans
- Poured Piers 5 and 10 expansion plate concrete



Week of July 22-28

- Completed north- and south-side east approach span traffic barriers
- Poured concrete for north- and south-side west approach span traffic barriers
- Poured concrete for west-side Pier 3 crossbeam
- West-half widening deck concrete poured for 3 pontoons



Week of July 29-31

- Stripped wood forms from new west and east approach spans
- New steel framing set in place for west-half bridge spans
- Worked on roll-off falsework (temporary steel support structures)
- Prepared for approach span roll

Project Site Completion Status	
Bridge Site Activity	Percent Completed
East Approach	85%
West Approach	85%
West Widening	80%

Source: WSDOT Hood Canal Bridge Project Office

New Faces, New Places – Hood Canal Bridge Project Team

George Titterness, *Transportation Engineer 3, Hood Canal Bridge Team*



The SR 104 Hood Canal Bridge project has been one of the most challenging and interesting projects for George Titterness. He developed the hydraulic report and storm water site plan for the Port Angeles Graving Dock during the project's design phase of the project. He worked on site as the Environmental Compliance Inspector and a Field Supervisor. George coordinated work between the contractor, the archaeologists, the Lower Elwha Klallam Tribe, and WSDOT in addition to his normal duties, like pontoon mock-up construction. Most recently, he led the project's three-day closure mitigation planning and implementation efforts.

George began his career as a party chief on a private survey crew. He had no idea then that the valuable experience he gained from doing this specialized survey work would help him during his 21-years of service for WSDOT.

In addition to his survey skills, George's design skills, attention to detail and can-do attitude have served him well as he worked on the Port Townsend Ferry Terminal, the Bogachiel River Bridge, the Dungeness River Bridge and the Sequim Bypass design.

Other things hold George's interest besides challenging design projects. Those include listening to Blues, taking amateur photos of Blues musicians, traveling, hiking, genealogy, and playing with his grandkids. Twice he has ridden his bicycle to the top of Hurricane Ridge and recommends everyone do that at least once in his or her life. Unfortunately, he has yet to recruit his wife Diane, daughter, three sons, two granddaughters and one grandson to join him on that venture.

Project Responsibilities: Three-day closure mitigation planning and implementation. Questions? TitterG@wsdot.wa.gov or (360) 457-2575

Gary Davis, *General Superintendent, Kiewit-General Construction Company*



The west and east approach span replacements and the roll technology utilized during this process have been Gary's primary responsibility. With 33 years of construction experience, he is well suited for the task.

Gary has worked for General Construction for 13 years, mostly on water-related projects such as the I-90 floating bridge. His 20 years of work for Riedel International in Portland, Oregon included port docks, recreational piers in California and numerous bridges up and down the west coast and Columbia River. He even went to Valdez, Alaska to work on the pipeline terminal and the Exxon Valdez oil spill.

On land or sea, Gary loves to be outside even when he isn't working. He and his wife, Jane, enjoy boating with family and friends whenever possible and spend the early weekend mornings on horse back in the hills behind their home. Even with commuting to and from Portland, Gary still finds time to ride his four horses year-round plus spoil the six dogs and two cats he rescued from animal shelters or picked up as strays.

Project Responsibilities: Trestle installation, drilled shafts, falsework support for existing and new approach spans, approach span rolls and demolition of old approach spans. Questions? Gary.Davis@kiewit.com or (360) 461-9116

Financial Picture

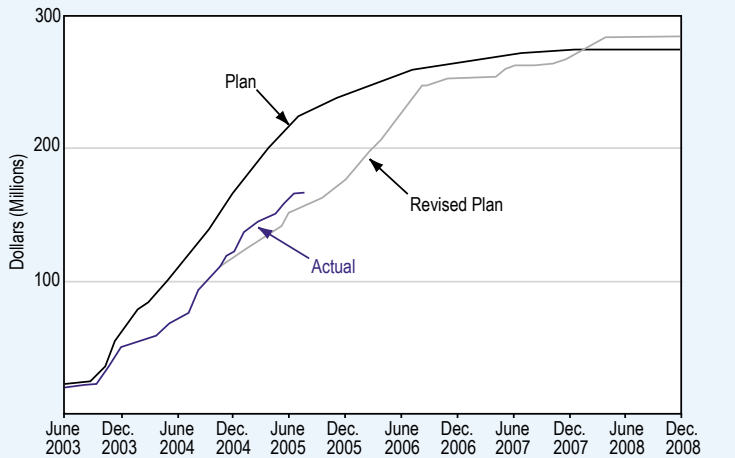
Project Cost Summary

Expenditures as of July 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.3
Right-of-Way	7.7	7.0
Construction	271.9	148.6
Total	\$292.0	\$167.9

Planned vs. Actual Expenditures

(Total Project Cost)



Source: WSDOT Hood Canal Bridge Project Office